

FUNDAMENTAL CONSTANTS

<u>Name</u>		<u>Value</u>
Avogadro's Number (Physical Scale)	N_O	6.0249×10^{23} molecules/gm mole (physical scale)
Base of Natural Logarithms	e	2.7183 . . .
Curie	c	3.7×10^{10} dis/sec
Gravitational Acceleration	g	980.7 cm/sec ²
Mass Unit, Atomic	amu	1.65979×10^{-24} gms = 1.0000 amu
Planck's Constant	h	6.625×10^{-27} erg-sec
Pi	π	3.1416 . . .
Stefan-Boltzmann Constant	k	5.67×10^{-5} erg/cm ² -deg ⁴ -sec = 1.380×10^{-16} erg/degree
Universal Gas Constant	R	0.08206 liter-atm/gm-mole/°K
Velocity of Light	c	2.998×10^{10} or 3×10^{10} cm/sec
Wave-Length Associated with 1 ev	λ_0	12397.67 Angstroms
First Zero of the Zero Order Bessel Function of the First Kind	J_0	2.40482 . . .

USEFUL VARIATIONS ON FUNDAMENTAL CONSTANTS

π^2	=	9.8696
π^3	=	31.006
J_0^2	=	5.7831
e^2	=	7.3890
e^3	=	20.085